



CONFIDENTIAL

# Room Air Conditioner

## **SVC MANUAL (Exploded View)**

**MODEL : S4-W24KE1Z1.EC6GERU (B24TS.SSK)**

### **CAUTION**

Before Servicing the unit, read the safety precautions in General SVC manual.  
Only for authorized service personnel.

# 1. Specification

| Buyer Model                       | Set (Indoor / Outdoor) |                               | Unit                      | B24TS.SSK ( B24TS.NSK / B24TS.UE )<br>S4-W24KE1Z1 ( S4NW24KE1Z1 / S4UW24KE1Z1 ) |           |        |
|-----------------------------------|------------------------|-------------------------------|---------------------------|---------------------------------------------------------------------------------|-----------|--------|
| Factory Model                     |                        |                               |                           |                                                                                 |           |        |
| Capacity                          | Cooling                | Min ~ Rated ~ Max             | kW                        | 1.26                                                                            | 6.45      | 7.18   |
|                                   |                        |                               | Btu/h                     | 3,500                                                                           | 22,000    | 24,500 |
|                                   |                        |                               | kcal/h                    | -                                                                               | -         | -      |
|                                   | Cooling (T3)           | Min ~ Rated ~ Max             | kW                        | -                                                                               | -         | -      |
|                                   |                        |                               | Btu/h                     | -                                                                               | -         | -      |
|                                   |                        |                               | kcal/h                    | -                                                                               | -         | -      |
| Heating                           | Min ~ Rated ~ Max      | kW                            | 1.26                      | 6.45                                                                            | 7.32      |        |
|                                   |                        | Btu/h                         | 3,500                     | 22,000                                                                          | 24,500    |        |
|                                   |                        | kcal/h                        | -                         | -                                                                               | -         |        |
| Cooling / Heating                 | Rated                  | kW                            | -                         | -                                                                               | -         |        |
|                                   |                        | Btu/h                         | -                         | -                                                                               | -         |        |
|                                   |                        | kcal/h                        | -                         | -                                                                               | -         |        |
| Power Input                       | Cooling                | Min ~ Rated ~ Max             | W                         | 240                                                                             | 2,010     | 2,420  |
|                                   |                        |                               | W                         | -                                                                               | -         | -      |
|                                   |                        |                               | W                         | 240                                                                             | 1,890     | 2,500  |
|                                   | Cooling / Heating      | Rated                         | W                         | -                                                                               | -         | -      |
|                                   |                        |                               | W                         | -                                                                               | -         | -      |
|                                   |                        |                               | W                         | -                                                                               | -         | -      |
| Cooling (T3)                      | Min ~ Rated ~ Max      | A                             | 1.14                      | 9.60                                                                            | 11.46     |        |
|                                   |                        | A                             | -                         | -                                                                               | -         |        |
|                                   |                        | A                             | -                         | -                                                                               | -         |        |
| Heating                           | Min ~ Rated ~ Max      | A                             | 1.14                      | 9.10                                                                            | 11.84     |        |
|                                   |                        | A                             | -                         | -                                                                               | -         |        |
|                                   |                        | A                             | -                         | -                                                                               | -         |        |
| EER                               |                        |                               | W/W                       | 3.21                                                                            |           |        |
|                                   |                        |                               | (Btu/h)/W                 | 10.95                                                                           |           |        |
| EER (T3)                          |                        |                               | W/W                       | -                                                                               |           |        |
|                                   |                        |                               | (Btu/h)/W                 | -                                                                               |           |        |
| EER Test (SR)                     |                        |                               | (Btu/h)/W                 | -                                                                               |           |        |
| SEER                              |                        |                               | (Btu/h)/W                 | -                                                                               |           |        |
| P design C                        |                        |                               | kW                        | -                                                                               |           |        |
| COP                               |                        |                               | W/W                       | 3.41                                                                            |           |        |
| SCOP                              |                        |                               | (Btu/h)/W                 | 11.64                                                                           |           |        |
| P design H                        |                        |                               | -                         | -                                                                               |           |        |
| APF                               |                        |                               | kW                        | -                                                                               |           |        |
| Energy Label Grade                |                        |                               | -                         | -                                                                               |           |        |
| Annual Energy Consumption         |                        |                               | -                         | -                                                                               |           |        |
|                                   |                        |                               | kWh/year                  | -                                                                               |           |        |
|                                   |                        |                               | kWh/year                  | -                                                                               |           |        |
| Operating Wattage                 |                        |                               | kWh                       | -                                                                               |           |        |
| Standby Wattage                   |                        |                               | Wh                        | -                                                                               |           |        |
| Annual Energy Cost                |                        |                               | \$                        | -                                                                               |           |        |
| Annual Power Fee                  |                        |                               | THB                       | -                                                                               |           |        |
| Power Supply                      |                        |                               | Ø, V, Hz                  | 1                                                                               | 220~240   | 50     |
| Available Voltage Range           |                        |                               | V                         | -                                                                               | 187 ~ 276 | -      |
|                                   |                        |                               | %                         | -                                                                               | 96.0      | -      |
| Power Factor                      |                        |                               | %                         | -                                                                               | 96.0      | -      |
|                                   |                        |                               | %                         | -                                                                               | 96.0      | -      |
| Moisture Removal                  |                        |                               | l/h                       | 2.0                                                                             |           |        |
| Indoor                            | Air Flow Rate          | Cooling, Max / H / M / L      | m³/min                    | 21 / 15 / 12 / 9                                                                |           |        |
|                                   |                        |                               | CFM                       | 741.6 / 529.7 / 423.8 / 317.8                                                   |           |        |
|                                   |                        | Heating, Max / H / M / L      | m³/min                    | 21 / 16 / 13 / 9.5                                                              |           |        |
|                                   |                        |                               | CFM                       | 741.6 / 565.0 / 459.1 / 335.5                                                   |           |        |
|                                   | Fan Motor Speed        | Cooling, Max/H/HM/M/ML/SL     | rpm                       | 1750/1350/1250/1150/1050/950/770                                                |           |        |
|                                   |                        |                               | rpm                       | 1700/1430/1330/1230/1080/930/840                                                |           |        |
|                                   | Sound Pressure Level   | Cooling, Max / H / M / L / SL | dB(A)                     | 55 / 47 / 42 / 37 / 31                                                          |           |        |
|                                   |                        |                               | dB(A)                     | 55 / 47 / 42 / 37                                                               |           |        |
|                                   | Sound Power Level      | Cooling, Max / H / M / L      | dB(A)                     | -                                                                               |           |        |
|                                   |                        |                               | dB(A)                     | -                                                                               |           |        |
|                                   | Dimensions (W × H × D) | Net                           | mm                        | 998                                                                             | 330       | 210    |
|                                   |                        |                               | in.                       | 39.3                                                                            | 13.0      | 8.3    |
|                                   |                        | Shipping                      | mm                        | 1145                                                                            | 395       | 300    |
|                                   |                        |                               | in.                       | 45.1                                                                            | 15.5      | 11.8   |
|                                   | Weight                 | Net                           | kg                        | 11.7                                                                            |           |        |
|                                   |                        |                               | kg                        | 14.1                                                                            |           |        |
|                                   | Exterior Color Code    | Cooling                       | -                         | Munsell 7.5BG 10/2                                                              |           |        |
|                                   |                        |                               | -                         | RAL 9016                                                                        |           |        |
|                                   |                        | Operation Range               | °C DB                     | 18 ~ 32                                                                         |           |        |
|                                   |                        |                               | °F DB                     | 64.4 ~ 89.6                                                                     |           |        |
| Outdoor                           | Air Flow Rate          | Cooling                       | °C WB                     | 12 ~ 23                                                                         |           |        |
|                                   |                        |                               | °F WB                     | 53.6 ~ 73.4                                                                     |           |        |
|                                   |                        | Heating                       | °C DB                     | 16 ~ 30                                                                         |           |        |
|                                   |                        |                               | °F DB                     | 60.8 ~ 86                                                                       |           |        |
|                                   | Fan Motor Speed        | Max                           | m³/min                    | 50.0                                                                            |           |        |
|                                   |                        |                               | rpm                       | 190                                                                             | -         | 840    |
|                                   |                        | Cooling, Min ~ Max            | rpm                       | 190                                                                             | -         | 840    |
|                                   |                        |                               | rpm                       | -                                                                               | -         | -      |
|                                   | Sound Pressure Level   | Cooling, Rated                | dB(A)                     | 55                                                                              |           |        |
|                                   |                        |                               | dB(A)                     | 57                                                                              |           |        |
|                                   | Sound Power Level      | Cooling, Rated                | dB(A)                     | -                                                                               |           |        |
|                                   |                        |                               | dB(A)                     | -                                                                               |           |        |
| Dimensions (W × H × D)            | Net                    | mm                            | 870                       | 655                                                                             | 320       |        |
|                                   |                        | in.                           | 34.3                      | 25.8                                                                            | 12.6      |        |
|                                   | Shipping               | mm                            | 1017                      | 718.6                                                                           | 432       |        |
|                                   |                        | in.                           | 40.3                      | 28.3                                                                            | 17.0      |        |
| Weight                            | Net                    | kg                            | 42.7                      |                                                                                 |           |        |
|                                   |                        | kg                            | 50.0                      |                                                                                 |           |        |
| Max. Fuse Size                    | A                      | -                             | 20                        |                                                                                 |           |        |
|                                   |                        | -                             | Munsell 9.54Y 8.34/1.31   |                                                                                 |           |        |
|                                   | Operation Range        | °C DB                         | 18 ~ 48                   |                                                                                 |           |        |
|                                   |                        | °F DB                         | 64.4 ~ 118.4              |                                                                                 |           |        |
| Circuit Breaker                   |                        |                               | °C DB                     | -5 ~ 24                                                                         |           |        |
|                                   |                        |                               | °F DB                     | 23 ~ 75.2                                                                       |           |        |
|                                   |                        |                               | °C WB                     | -5 ~ 18                                                                         |           |        |
|                                   |                        |                               | °F WB                     | 23 ~ 65                                                                         |           |        |
| Power Supply Cable                |                        |                               | A                         | 20                                                                              |           |        |
|                                   |                        |                               | No.                       | 3                                                                               |           |        |
|                                   |                        |                               | mm                        | 1.5                                                                             |           |        |
| Power Supply to Unit              |                        |                               | AWG                       | 14                                                                              |           |        |
|                                   |                        |                               | No.                       | Outdoor                                                                         |           |        |
|                                   |                        |                               | No.                       | 4                                                                               |           |        |
| Power and Communication Cable     |                        |                               | mm                        | 0.75                                                                            |           |        |
|                                   |                        |                               | AWG                       | 18                                                                              |           |        |
| Piping                            | Size                   | Liquid                        | mm                        | Ø 6.35                                                                          |           |        |
|                                   |                        | Gas                           | mm                        | Ø 15.88                                                                         |           |        |
| Connections Method                | Indoor / Outdoor       | -                             | Flared / Flared           |                                                                                 |           |        |
|                                   |                        | -                             | 28.0, 16.4                |                                                                                 |           |        |
| Drain Hose Size                   | O.D. I.D               | mm                            | 1.10, 0.65                |                                                                                 |           |        |
|                                   |                        | in.                           | -                         |                                                                                 |           |        |
| Between Indoor & Outdoor          | Piping Length          | Min / Standard / Max          | m                         | 3.6                                                                             | 7.5       | 20     |
|                                   |                        | No Charge                     | m                         | -                                                                               | 7.5       | -      |
| Piping Connection Heat Insulation |                        |                               | m                         | 10                                                                              |           |        |
| Refrigerant                       | Type                   | -                             | Both liquid and gas pipes |                                                                                 |           |        |
|                                   |                        | -                             | R410A                     |                                                                                 |           |        |
|                                   |                        | Pre Charge                    | g                         | 1400                                                                            |           |        |
|                                   |                        | Additional Charge             | g/m                       | 20                                                                              |           |        |
|                                   |                        | Control                       | -                         | Capillary                                                                       |           |        |
| Defrost Method                    | t-CO <sub>2</sub> eq   | -                             | 2087.5                    |                                                                                 |           |        |
|                                   |                        | -                             | 2.92                      |                                                                                 |           |        |
|                                   |                        | -                             | Reverse Cycle             |                                                                                 |           |        |
| Tool Code (Chassis)               |                        | Indoor / Outdoor              | -                         | SK / UE                                                                         |           |        |

## Note

- : No Relation
- For Circuit Breaker Rating, please conform to local standards whenever necessary.
- External color code is approximate value.
- It is difficult to measure air flow rate of sleep because of small values.
- Maximum heating capacity is for heating operation without any frost.
- Due to our policy of innovation some specifications may be changed without notifications.

|                        |
|------------------------|
| Conversion Formula     |
| kW = Btu/h x 0.0002931 |
| CFM = CMM x 35.3       |

## 2. Function

| Category             | Function                                                             | S4-W24KE1Z1<br>B24TS                                       |
|----------------------|----------------------------------------------------------------------|------------------------------------------------------------|
| Air Flow             | Air Supply Outlet                                                    | 1                                                          |
|                      | Airflow Direction Control (Left & Right)                             | 5 Steps                                                    |
|                      | Airflow Direction Control (Up & Down)                                | 6 Steps                                                    |
|                      | Auto Swing (Left & Right)                                            | ○                                                          |
|                      | Auto Swing (Up & Down)                                               | ○                                                          |
|                      | Fan Speed Steps (Fan / Cool / Heat)                                  | 5 / 6 / 6                                                  |
|                      | Natural Wind (Auto Wind)                                             | ○                                                          |
|                      | Jet Cool / Jet Heat (Power Wind)                                     | ○ / ○                                                      |
| Air Purifying        | Comfort Air                                                          | ○                                                          |
|                      | Pre-filter (Washable / Anti-Bacteria)                                | ○                                                          |
|                      | Deodorizing Filter                                                   | X                                                          |
|                      | 3M Micro Dust Filter                                                 | ○                                                          |
|                      | 3M Multi Protection Filter                                           | X                                                          |
| Installation         | Plasma Air Purifier (Ionizer)                                        | ○                                                          |
|                      | Drain Pump                                                           | X                                                          |
| Reliability          | Hot Start                                                            | ○                                                          |
|                      | Self Diagnosis                                                       | ○                                                          |
|                      | De-ice Control (Defrost)                                             | ○                                                          |
|                      | Dry (Dehumidification) Operation                                     | ○                                                          |
| Convenience          | Auto Changeover                                                      | ○                                                          |
|                      | Auto Operation (Artificial Intelligence)                             | X                                                          |
|                      | Auto Cleaning (Coil Dry)                                             | ○                                                          |
|                      | Auto Restart Operation                                               | ○                                                          |
|                      | Child Lock <sup>1</sup>                                              | X                                                          |
|                      | Forced Operation                                                     | ○                                                          |
|                      | Group Control <sup>1</sup>                                           | X                                                          |
|                      | Sleep Mode                                                           | 7hr                                                        |
|                      | Timer 24hr (On/Off) / 7hr (Off)                                      | ○ / X                                                      |
|                      | Timer (Weekly) <sup>1</sup>                                          | X                                                          |
|                      | Two Thermistor Control <sup>1</sup>                                  | X                                                          |
|                      | Low Ambient Operation                                                | ○                                                          |
|                      | Overheating Protection                                               | X                                                          |
|                      | Low Heating                                                          | ○                                                          |
|                      | Voice Control                                                        | X                                                          |
|                      | Smart Scan (PIR)                                                     | X                                                          |
|                      | LG AC Tag On (NFC)                                                   | X                                                          |
|                      | Outdoor Silent Mode                                                  | ○                                                          |
|                      | Mosquito Away                                                        | X                                                          |
|                      | Smart Diagnosis                                                      | ○                                                          |
|                      | Indoor Unit Display Type                                             | Number Display                                             |
|                      | Indoor Unit Display Light                                            | On/Off                                                     |
|                      | Energy Display                                                       | ○                                                          |
| Energy Saving        | Energy Saving                                                        | X                                                          |
|                      | Active Energy Control (Watt Option)                                  | ○                                                          |
|                      | Gen Mode                                                             | X                                                          |
|                      | Wired Remote Controller (Premium) <sup>2</sup>                       | X                                                          |
| Individual Control   | Wired Remote Controller (Standard) <sup>2</sup>                      | X                                                          |
|                      | Wired Remote Controller (Simple with Mode Selection) <sup>2</sup>    | X                                                          |
|                      | Wired Remote Controller (Simple without Mode Selection) <sup>2</sup> | X                                                          |
|                      | (See Remote Controller Section)                                      | AKB74955603                                                |
|                      | Handheld Wireless Controller                                         | Setting Temperature Range (Cooling)<br>18~30 °C (64~86 °F) |
|                      |                                                                      | Setting Temperature Range (Heating)<br>16~30 °C (60~86 °F) |
| CAC Network Function | General Central Controller (Non LGAP)                                | X                                                          |
|                      | Network Solution (LGAP)                                              | ○                                                          |
|                      | Dry Contact <sup>2</sup>                                             | X                                                          |
|                      | PDI (Power Distribution Indicator) <sup>2</sup>                      | X                                                          |
|                      | Outdoor Unit PI 485 <sup>2</sup>                                     | X                                                          |
| Special Function Kit | Wi-Fi <sup>2</sup>                                                   | PCRCUDT*                                                   |
|                      | Water Level Sensor Connection <sup>2</sup>                           | X                                                          |
|                      | Wind Baffle Kit <sup>2</sup>                                         | X                                                          |
|                      | Sump Heater                                                          | X                                                          |
|                      | Sheath Heater <sup>2</sup>                                           | X                                                          |
|                      | Crank Case Heater                                                    | X                                                          |
|                      | Smart Inverter Monitoring System (SIMs) <sup>2</sup>                 | X                                                          |
| Others               | Mode Lock                                                            | X                                                          |
|                      | Temperature Control                                                  | Wireless Controller                                        |
|                      | DRED (Demand Response Enabling Device)                               | X                                                          |

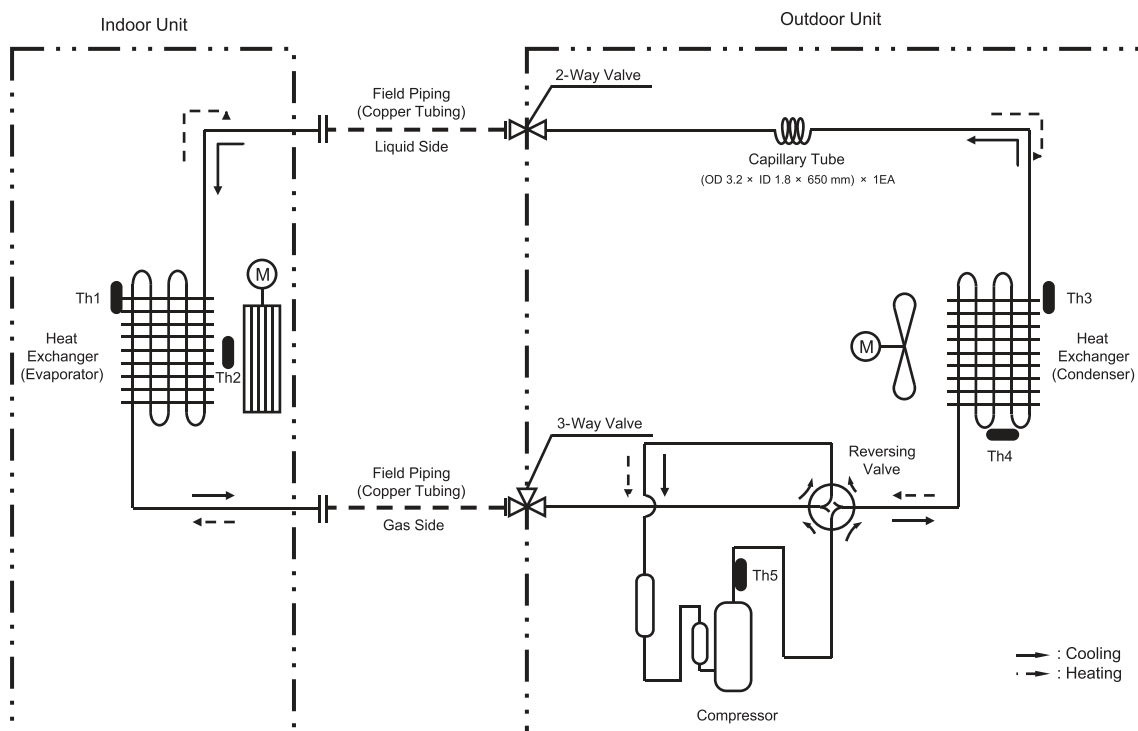
### Note

○ : Applied, X : Not available

- When you want to change from Wi-Fi mode to Dry Contact mode, normal operation is applied after 3 minutes.
- For LS\*\*\*HSV3 and LS\*\*\*HV3 model when Dry Contact mode is operated, Wi-Fi function can not be used.
- Some specifications may be changed without notifications due to our policy of innovation.
- The air conditioner which DRED is available is capable of DRM1, DRM2 and DRM3 and complies with standard AS/NZS 4755.3.1.

### 3. Refrigerant Cycle Diagram

Model : S4-W24KE1Z1



| LOC. | Description                                  | PCB Connector    |
|------|----------------------------------------------|------------------|
| Th1  | Thermistor for indoor air temperature        | CN-TH1 (Indoor)  |
| Th2  | Thermistor for evaporator middle temperature | CN-TH3 (Indoor)  |
| Th3  | Thermistor for outdoor air temperature       | CN-TH1 (Outdoor) |
| Th4  | Thermistor for condensing temperature        |                  |
| Th5  | Thermistor for discharge pipe temperature    | CN-TH2 (Outdoor) |

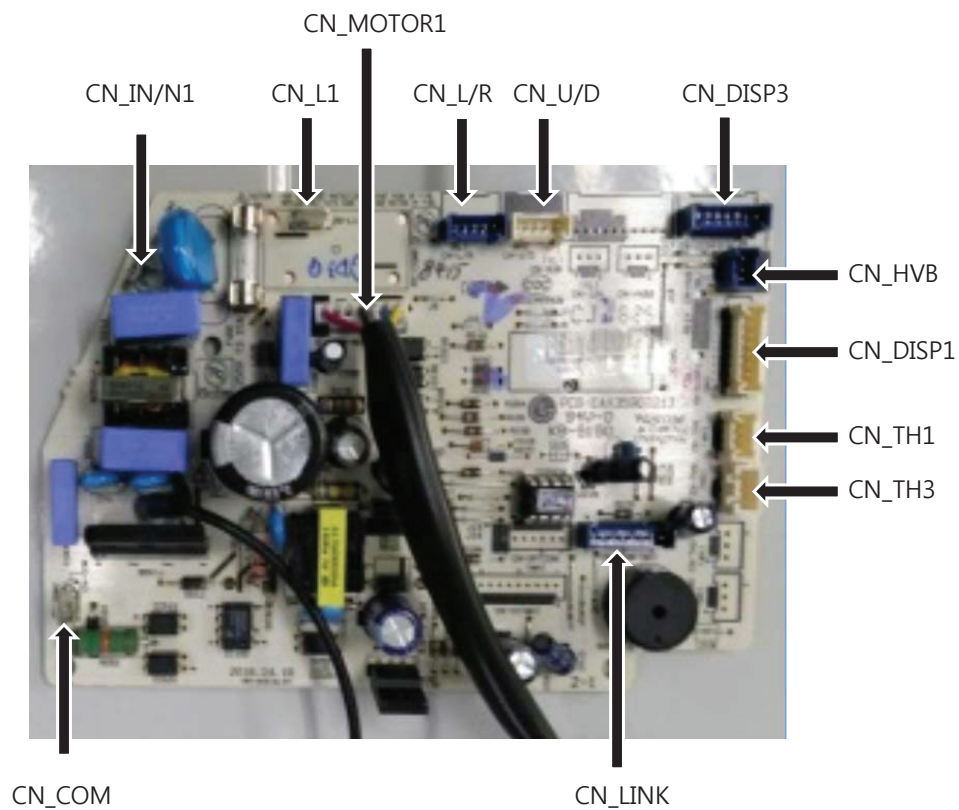
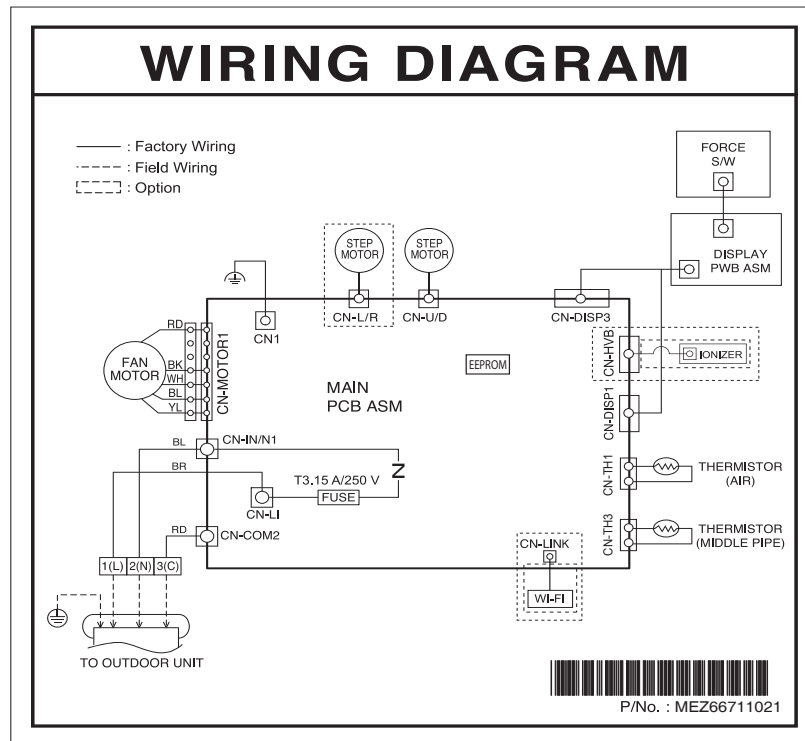
#### ■ Refrigerant Pipe Connection Port Diameters

| Model              | Gas     |       | Liquid |       |
|--------------------|---------|-------|--------|-------|
|                    | mm      | inch  | mm     | inch  |
| <b>S4-W24KE1Z1</b> | Ø 15.88 | Ø 5/8 | Ø 6.35 | Ø 1/4 |

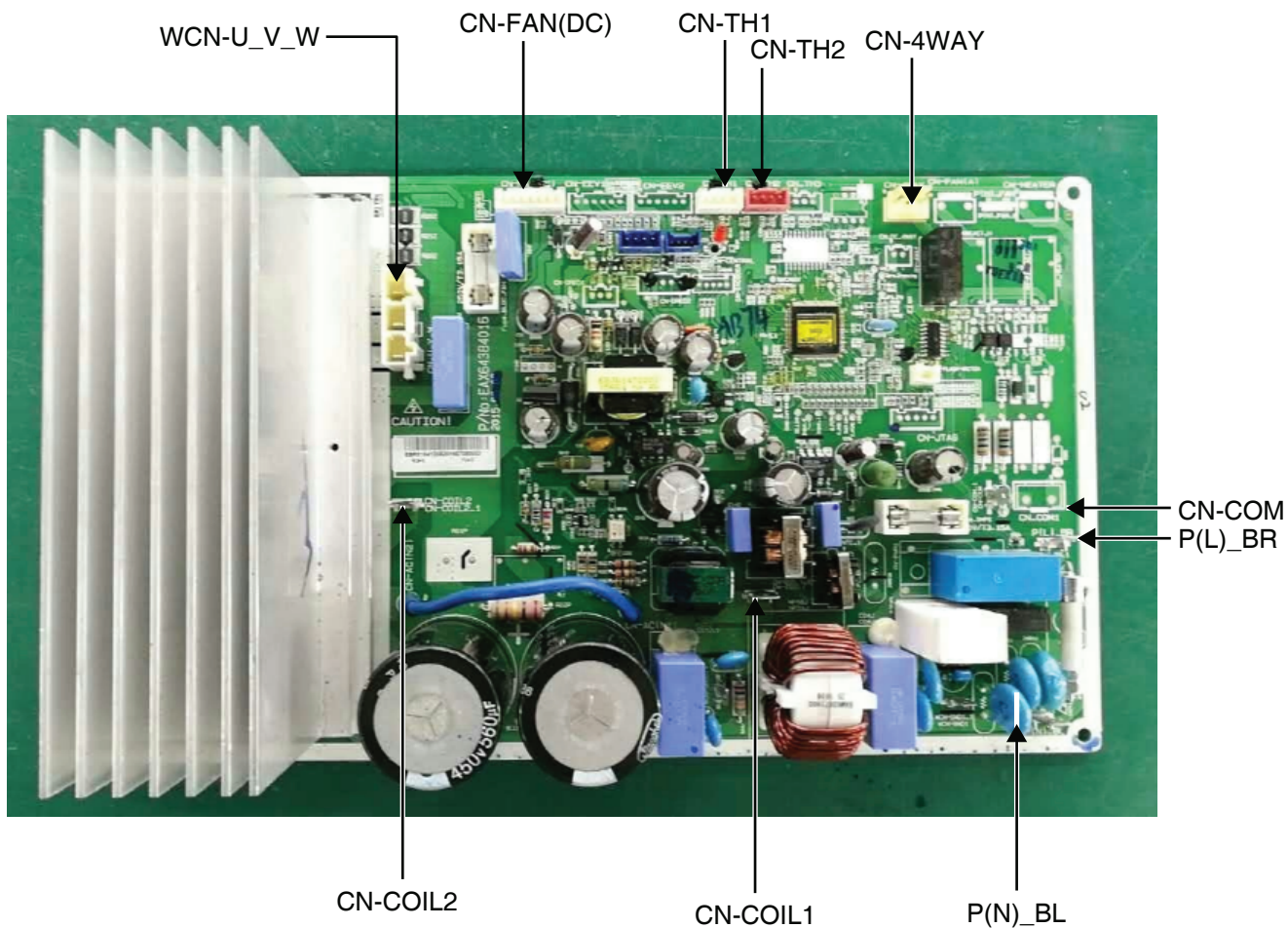
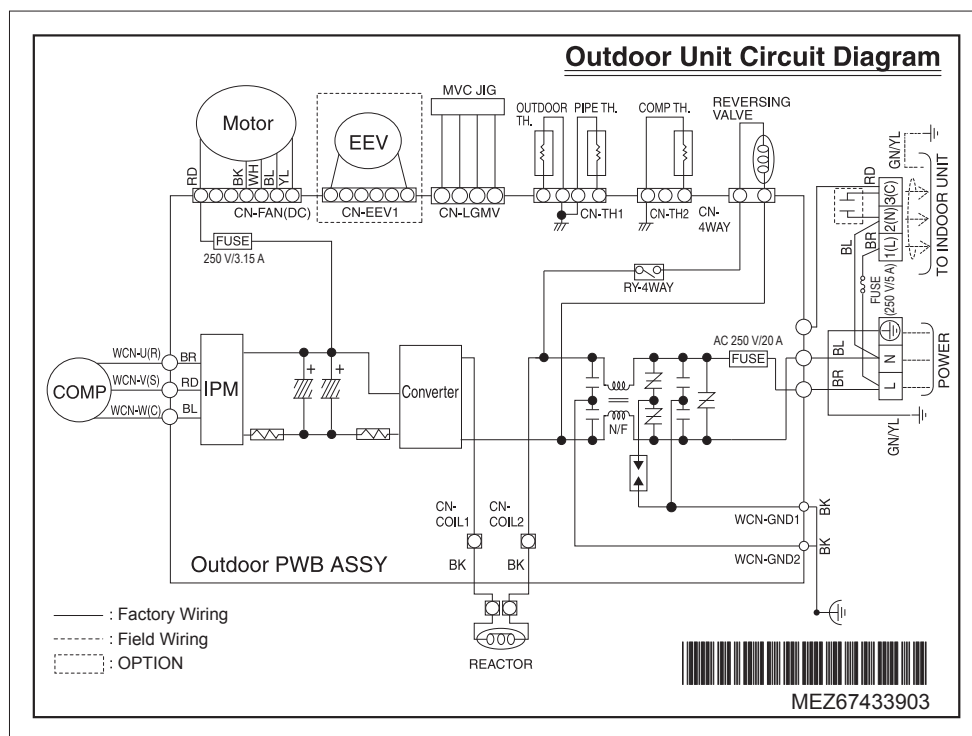
|          |                                  |                |                            |                    |                 |                 |
|----------|----------------------------------|----------------|----------------------------|--------------------|-----------------|-----------------|
| Appendix | Heat Exchanger                   | Propeller Fan  | Cross Flow Fan             | Compressor         | Accumulator     | 4 Way Valve     |
|          | EEV (Electronic Expansion Valve) | Capillary Tube | 2-Way Valve<br>3-Way Valve | Temperature Sensor | Pressure Sensor | Pressure Switch |
|          | Check Valve                      | Flare Joint    | Muffler                    | Strainer           |                 |                 |

## 4. Wiring Diagrams

### Indoor Unit

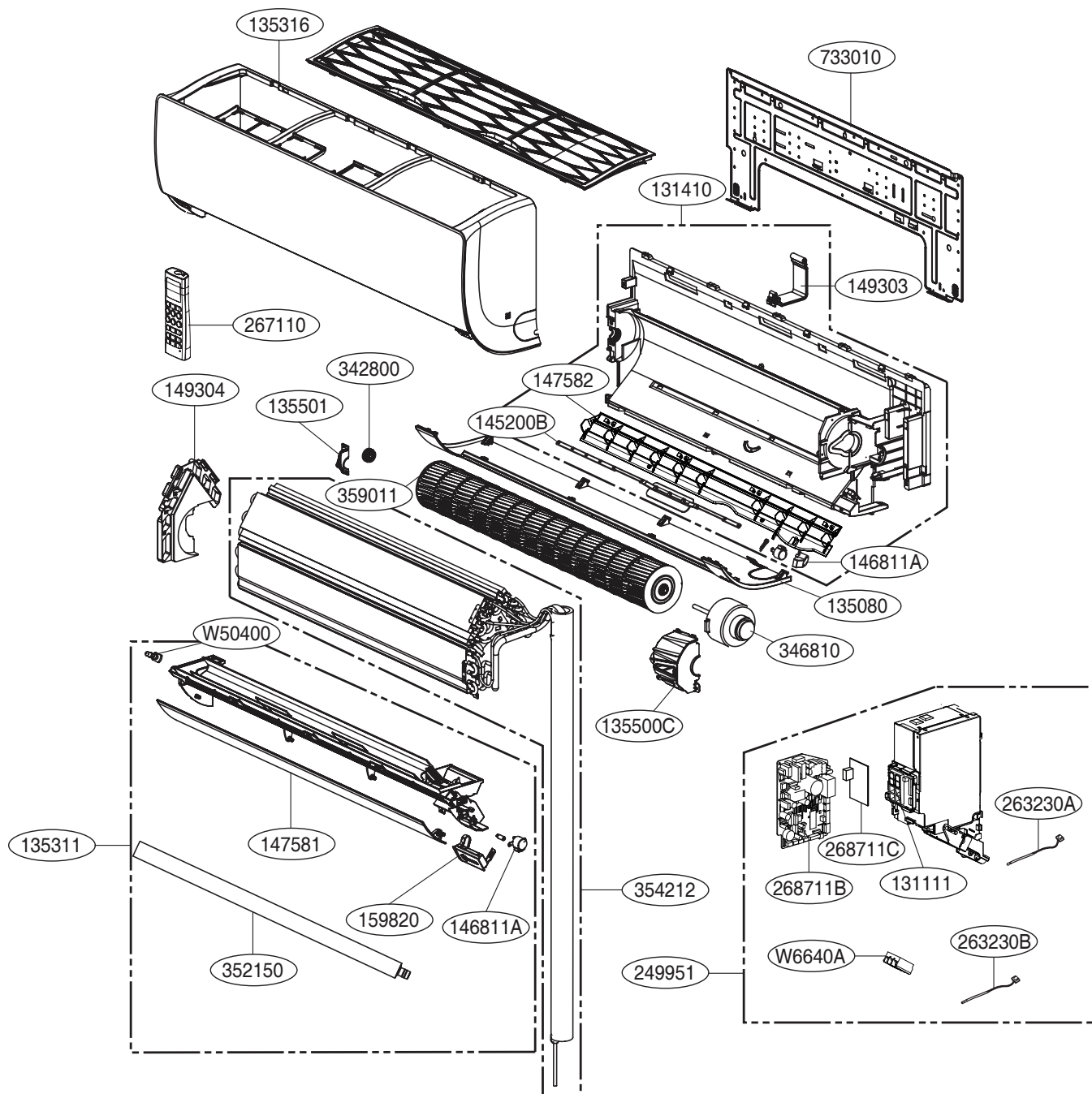


## Outdoor Unit



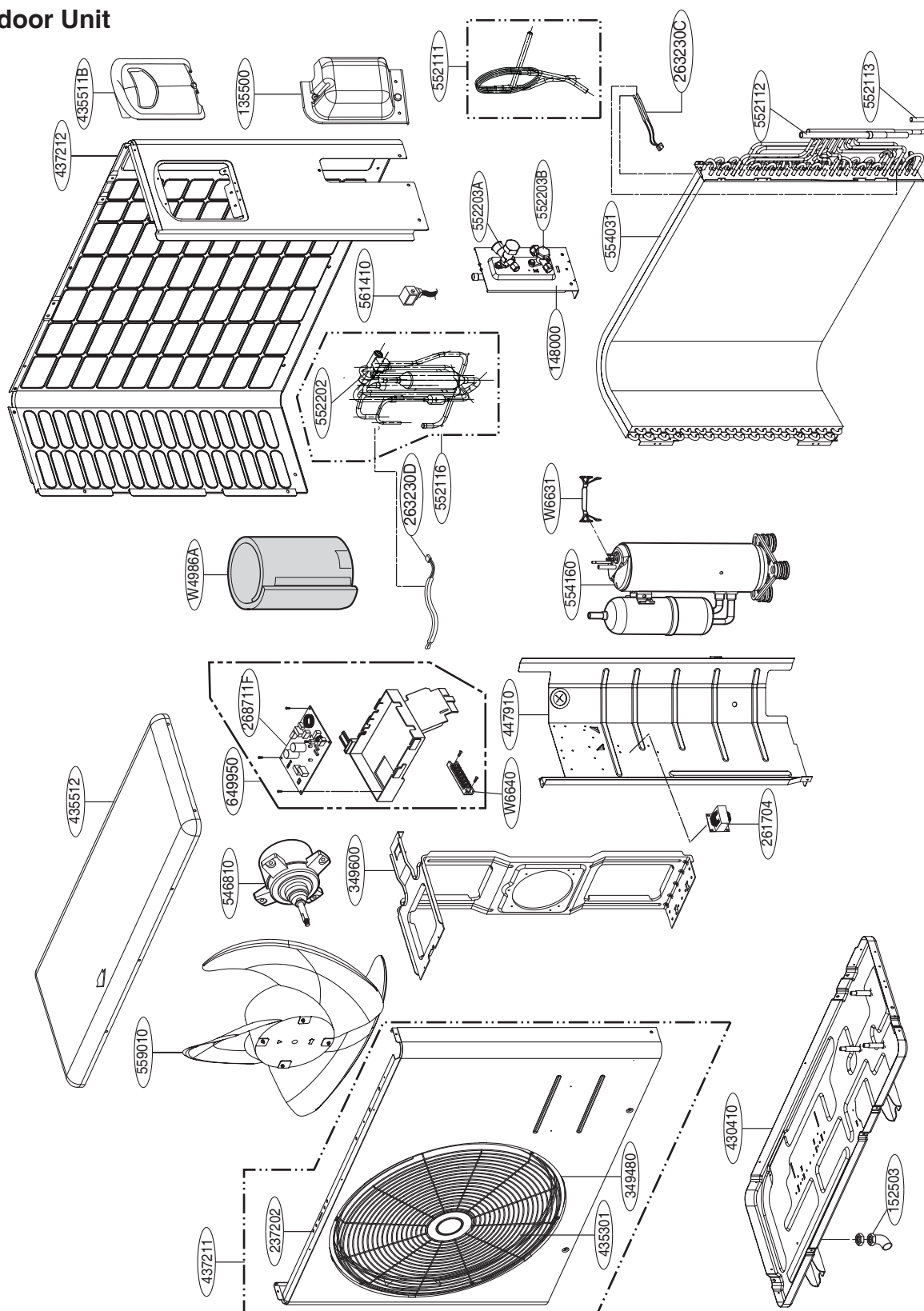
## 5. Exploded View

### Indoor Unit



| LOC.    | Description                                  | PCB Connector   |
|---------|----------------------------------------------|-----------------|
| 263230A | Thermistor for indoor air temperature        | CN-TH1 (INDOOR) |
| 263230B | Thermistor for evaporator middle temperature | CN-TH3 (INDOOR) |

## Outdoor Unit



| LOC.    | Description                               | PCB Connector    |
|---------|-------------------------------------------|------------------|
| 263230C | Thermistor for condensing temperature     | CN-TH1 (OUTDOOR) |
|         | Thermistor for outdoor air temperature    |                  |
| 263230D | Thermistor for discharge pipe temperature | CN-TH2 (OUTDOOR) |



P/NO : MFL70404779

Dec, 2018

## Техника для климата

Доставляем оборудование по всей России от 3 дней транспортными компаниями. Реализуем проекты в десятках регионов — от Калининграда до Владивостока.

**9600+**

объектов и поставок

**от 1 дня**

отгрузка в транспортную компанию

### Технические данные файла

Документ: Сервисная инструкция LG B24TS

Идентификатор библиотеки: LIB-003563

Исходный файл: lg-b24ts-servisnaya-instruktsiya.pdf

SHA-256 оригинала: ab96e1db0a1a86ba64c6a595f4e98819e5591793fbf9d1affdd747112502cbaa

Постоянная ссылка: <https://iclim.ru/library/lg-b24ts-servisnaya-instruktsiya.pdf>

Копия сформирована: 02.10.2026 09:45 UTC